

CLAIMS

1. An arrangement in an mechanical shaft seal comprising at least one sliding surface part (2) rotating with a shaft (14) in relation to a frame (13) of the device, at least one sliding surface part (4) fastened to the frame (13) and/or to a separate frame part (3) that is non-rotatable in relation thereto, the sliding surface part (2) rotating in relation to the frame (13) and the non-rotating sliding surface part (4) are provided with sliding surfaces (15) pressed against one another, at least one additional part (7) arranged to connect the sliding surface part (2) rotating in relation to the frame (13) to the shaft (14) and/or to at least one insertion part (1) fastened to the shaft (14) and rotating therewith in order to transfer the rotating motion from the shaft (14) to the sliding surface part (2), and at least one additional part (8) arranged to connect the sliding surface part (4), which is non-rotatable in relation to the frame (13), to the frame (13) or at least to one insertion part (6) connected to the frame in order to prevent the rotation of the sliding surface part (4) in relation to the frame (13), **characterized** in that at least one of the additional parts (7) arranged to transfer the rotation torque of the shaft and/or at least one of the additional parts (8) receiving torque is a memory metal element arranged to bend within the limits of the reversible deformation of the material.

2. An arrangement as claimed in claim 1, **characterized** in that all the additional parts (7, 8) are memory metal elements.

3. An arrangement as claimed in claim 1, **characterized** in that the additional parts (7, 8) are pins.

4. An arrangement as claimed in claim 3, **characterized** in that the additional parts (7, 8) are threaded pins.

5. An arrangement as claimed in claim 1, **characterized** in that the additional parts (7, 8) are plates.

6. An arrangement as claimed in claim 1, **characterized** in that the additional parts (7, 8) are rings.

7. An arrangement as claimed in claim 1, **characterized** in that the additional parts (7, 8) are machining features of the sliding surface parts (1, 2) rotating in relation to the frame (13) and/or of the non-rotating sliding surface part (4).

8. An arrangement as claimed in any one of preceding claims 1 to 7, **characterized** in that the arrangement also comprises at least one

spring (5), which is arranged to press the opposite sliding surfaces (15) of the sliding surface parts (1, 2) and the sliding surface part (4) against one another.

9. An arrangement as claimed in claim 8, **characterized** in that the arrangement comprises an insertion part (6) movably fastened in the longitudinal direction of the shaft (14) to the frame (13), which is connected to the sliding surface part (4) that is non-rotatable in relation to the frame (13) and which is pressed using the spring (5) against the sliding surface part (4), the sliding surface (15) thereof being further pressed against the sliding surface of the sliding surface part (1, 2) that is rotatable in relation to the frame (13).